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MINERALS PROGRAM
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DIVISION OF
OIL, GAS & MINING

November 27, 1989

Mr. Ed King
Jumbo Mining Company
6305 Fern Spring Cove
Austin, Texas 78730

Subject: Jumbo Mine Pad No. 7 and No. 2
(Low Grade).

Dear Mr. King:

We have reviewed additional information transmitted with your 4 November 1989 letter concerning Pad No. 7 and Pad No. 2 (low grade). The information reviewed includes recommendation from Industrial and Environmental Plastics, Inc., in their letter of 6 October 1989, and well and neutron logs.

Based on our review, you may begin the leaching of ore on pad Nos. 7 and 2 (low grade) for a 60-day test period subject to the following conditions:

- a. A plan showing the proposal for diversion and redirection of surface runoff from the area north of pad Nos. 3, 6, and LG 3 must be submitted for review and approval on or before December 15, 1989.
- b. A neutralization plan detailing procedures, chemicals to be used, rate of application and the expected quality of rinsate is required for our review and approval on or before January 12, 1990.
- c. Neutron- γ logs must be made again of the 10 monitoring points after the 60-day test period.
- d. Further operation is subject to a review of the initial and subsequent neutron- γ logs, and a visual inspection for moisture in the mine pits, walls, and gullies below pads.
- e. No new ore is to be loaded on the pads during this test period.

The Bureau must be advised of the beginning of the 60-day test operation and conclusion thereof by telephone within 24 hours and in writing within five days.

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Regarding the neutralization criteria, our construction permit letter of March 16, 1984 required that:

Detoxification of the rock when leaching is completed will be carried out by chemical addition to the leach spray system to breakdown residue cyanide prior to covering with topsoil and seeding for reclamation.

Current neutralization criteria are:

pH - 6.5 to 7.5; Weak acid dissociable (WAD) cyanide less than or equal to 150 µg per liter; total cyanides less than or equal to 750 µg per liter; metal content in the rinsate shall meet the *Water Quality (MCLs) Rules, R449-103, Utah Administrative Code* or federal drinking water standards or the background groundwater quality whichever is less stringent.

Also, if the operation is permitted beyond a two-year period, a minimum of three samples of the liner material must be tested every two years pursuant to the recommendation of Industrial and Environmental Plastics, Inc.

If you have any other questions in the matter, please contact Mr. Mack Croft of my staff.

Sincerely,

Utah Water Pollution Control Committee



Don A. Ostler, P.E.
Executive Secretary

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FILE:IND:Jumbo Mining

cc: Mr. Roger Foisy, P. E., State Health Department, Richfield
Mr. Wayne Hedberg, Oil, Gas & Mining
Mr. Bruce Hall, Central Utah District Health Department